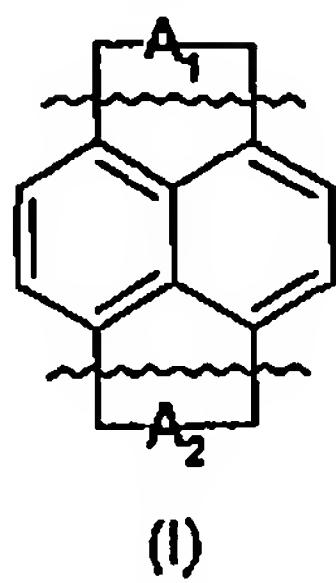


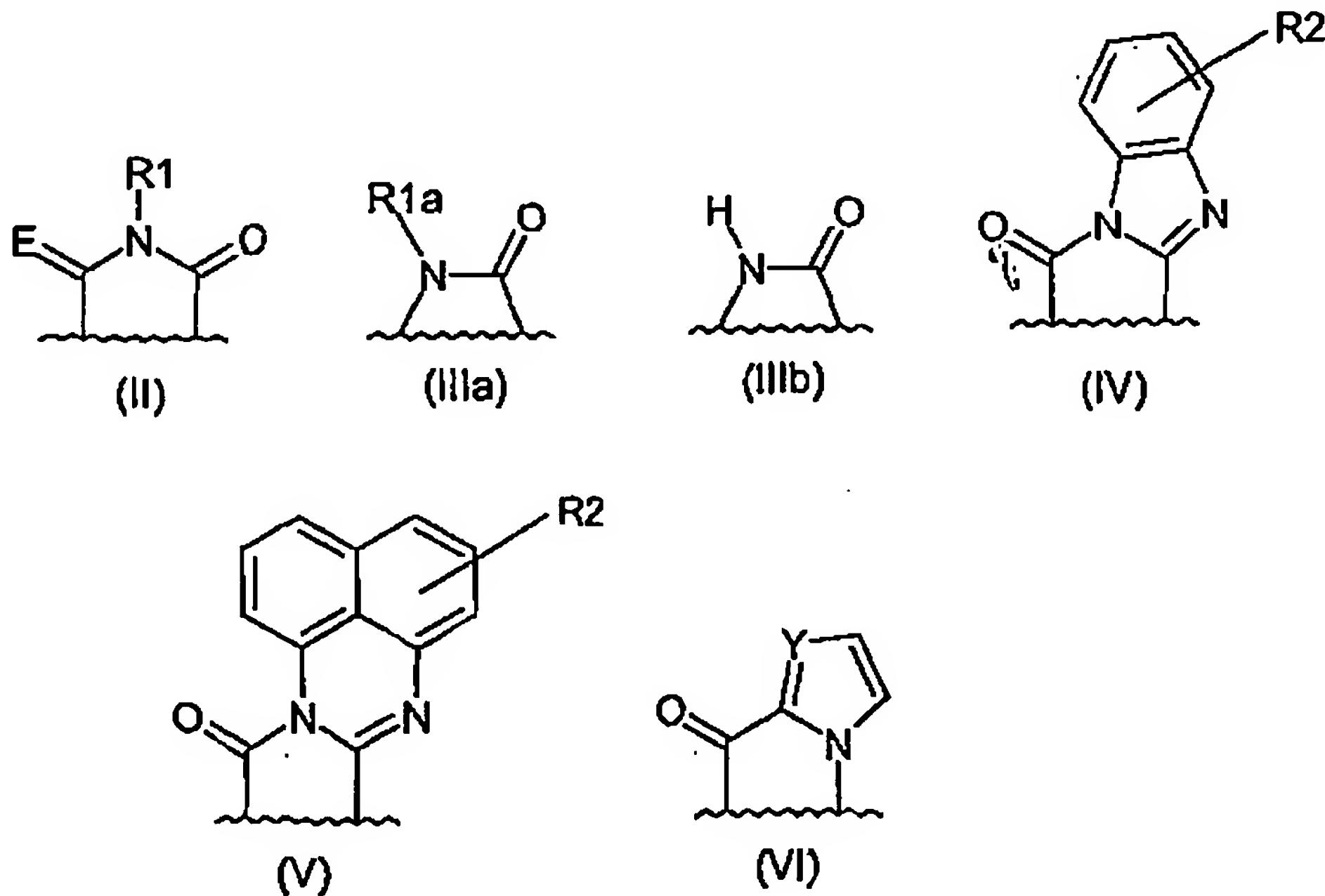
CLAIMS

1. Naphthalene derivatives of general formula (I)



wherein

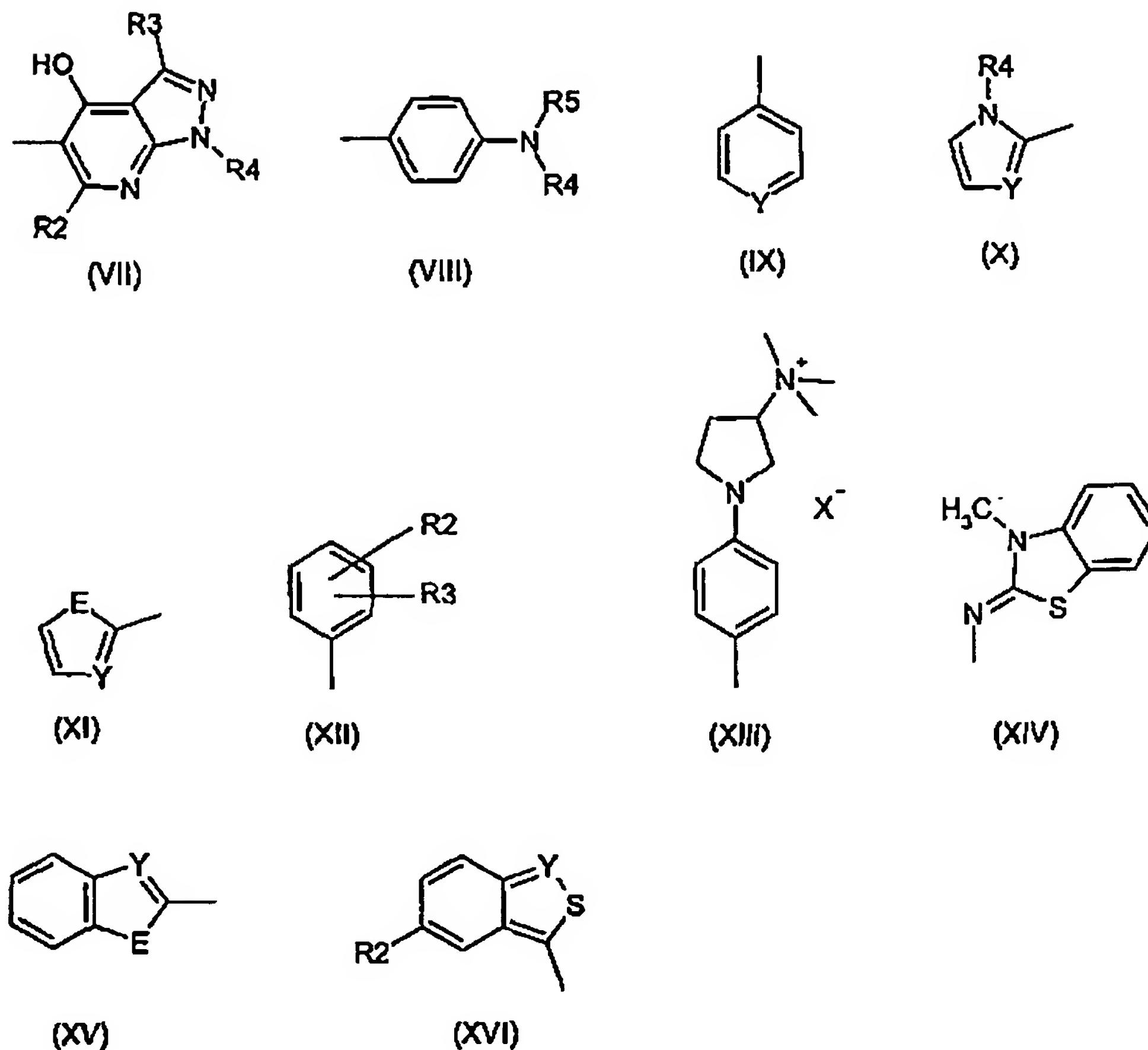
A₁ and **A**₂ are different and independently of each other represent partial structures of formulas (II), (IIIa), (IIIb), (IV), (V) or (VI) among which formulas (II), (IIIa), (IIIb), (IV) and (V) are preferred;



E stands for oxygen or a sulfur atom;

Y stands for a nitrogen atom or (preferably) a quaternary nitrogen atom substituted with branched or linear C₁-C₆-alkyl groups, branched or linear C₂-C₄-hydroxyalkyl groups or branched or linear C₄-C₆-polyhydroxyalkyl groups;

R_1 denotes a hydrogen atom, an aromatic or heterocyclic group of general formula (VII), (VIII), (IX), (X), (XI), (XII), (XIII), (XIV), (XV) or (XVI),



or an aliphatic C₁-C₆-alkyl group that is linear or branched and is unsubstituted or substituted with one or more hydroxyl groups or with cationic groups of the B⁺ type;

R_{1a} has the same meaning as R₁ with the exception of hydrogen,

R₂ and R₃ can be equal or different and denote hydrogen, an amino group, a C₁-C₆-alkylamino group, a C₁-C₆-N,N-dialkylamino group, a C₁-C₆-N,N-(dihydroxyalkyl)amino group, fluorine, chlorine, bromine, iodine, a cyano group, a C₁-C₆-alkylcyano group, a methoxymethyl group, a tert.-butyl group, an isopropyl group, a C₁-C₆-alkyl group, a C₁-C₆-alkyloxy group, a C₁-C₆-hydroxyalkyl group, a C₁-C₆-hydroxyalkyloxy group, a C₁-C₆-alkylcarboxylic acid group, a C₁-C₆-alkylcarboxylate ester group, a C₁-C₆-alkylcarboxamide group, a C₁-C₆-alkylsulfonic acid group, a C₁-C₆-alkylsulfonate ester group, a C₁-C₆-alkylsulfonamide group, a phenyl group, a sulfonic acid group or an -(L)-B⁺- group;

R₄ and R₅ can be equal or different and denote hydrogen, a C₁-C₆-alkylamino group, a C₁-C₆-N,N-dialkylamino group, a C₁-C₆-alkylcyano group, a methoxymethyl group, a tert. butyl group, an isopropyl group, a C₁-C₆-alkyl group, a C₁-C₆-alkyloxy group, a C₁-C₆-hydroxyalkyl group, a C₁-C₆-alkylcarboxylic acid group, a C₁-C₆-alkylcarboxylate ester group, a C₁-C₆-alkylcarboxamide group, a C₁-C₆-alkylsulfonic acid group, a C₁-C₆-alkylsulfonate ester group, a C₁-C₆-alkylsulfonamide

group, a phenyl group or an -(L)-B⁺- group;

L stands for a C₁-C₆-alkylene group;

B⁺ stands for an aromatic heterocyclic quaternary ammonium compound; a nonaromatic heterocyclic quaternary ammonium compound; a quaternary alkylammonium compound or arylammonium compound of formula NR_aR_bR_c wherein R_a, R_b and R_c independently of each other denote a benzyl group, a phenyl group or a C₁-C₆-alkyl group, the aforesaid alkyl groups possibly being unsubstituted or substituted with one or more hydroxyl groups or amino groups; or a quaternary phosphonium group; and

X⁻ denotes an anion,

2. Naphthalene derivative of general formula (I) as defined in claim 1, characterized in that it is selected from among 1-(2-tert. butylphenyl)-6-(2-hydroxyethyl)-1H-indolo[5,4,3-def]isoquinoline-2,5,7(6H)-trione, 1-(2-tert. butylphenyl)-6-[2-hydroxy-1-(hydroxymethyl)ethyl]-1H-indolo[5,4,3-def]isoquinoline-2,5,7(6H)-trione, 3-{2-[2-(2,5-diketo-5,6-dihydroisoindolo[6,7,1-cde]indol-1(2H)-yl)-5-methoxyanilino]ethyl}-1-methyl-1H-imidazol-3-ium bromide, 3-{2-[4-(2,5-diketo-5,6-dihydroisoindolo[6,7,1-cde]indol-1(2H)-yl)(ethyl)anilino]ethyl}-1-methyl-1H-imidazol-3-ium bromide, 1-{4-[ethyl(2-hydroxyethyl)amino]phenyl}-6-methyl-2,5-diketo-2,5-dihydro-1H-imidazo[1,2-a]isoindolo[6,7,1-def]quinolin-6-ium methylsulfate, 3-{2-[4-(2,5-diketo-2,5-dihydro-1H-imidazo[1,2-a]isoindolo[6,7,1-def]quinolin-1-yl)(ethyl)anilino]ethyl}-1-methyl-1H-imidazol-3-ium bromide, 1-{2-[(2-hydroxyethyl)amino]-4-methoxyphenyl}-1,6-dihydroisoindolo[6,7,1-cde]indole-2,5-dione, 1-{4[bis-(2-hydroxyethyl)amino]phenyl}-1,6-dihydroisoindolo[6,7,1-cde]indol-2,5-dione, 3-{2-[1-(2-tert. butylphenyl)-2,5,7-triketo-1,2,5,7-tetrahydro-6H-indolo-[5,4,3-def]isoquinolin-6-yl]ethyl}-1-methyl-1H-imidazol-3-ium bromide, 3-(2-{1-[4-(dimethylamino)phenyl]-2,5,7-triketo-1,2,5,7-tetrahydro-6H-indolo[5,4,3-def]isoquinolin-6-yl}ethyl)-1-methyl-1H-imidazol-3-ium bromide, 2-(4-morpholinyl)benzo[Imn]perimidino[2,1-b][3,8]-phenanthroline-1,3,6(2H)-trione, 2-[tert. butyl-(2-hydroxyethyl)amino]benzo[Imn]-perimidino[2,1-b][3,8]phenanthroline-1,3,6(2H)-trione, 2-[1-(hydroxymethyl)-2-methylpropyl]benzimidazo[2,1-b]benzo[Imn]-[3,8]phenanthroline-1,3,6[2H]-trione, 5-methyl-2-(1,3,6-triketo-3,6-dihydrobenzo[Imn]perimidino-[2,1-b][3,8]-phenanthrolin-2(1H)-yl)benzenesulfonic acid and 5-methyl-2-(1,3,6-triketo-3,6-dihydrobenzimidazo[2,1-b]benzo[Imn][3,8]-phenanthroline-2(1H)-yl)benzenesulfonic acid.

3. Naphthalene derivative of general formula (I) as defined in claim 1 or 2, characterized in that it is selected from among 1-(2-tert. butylphenyl)-6-(2-hydroxyethyl)-1H-indolo[5,4,3-def]isoquinoline-2,5,7(6H)-trione, 1-(2-tert. butyl)-6-[2-hydroxy-1-(hydroxymethyl)ethyl]-1H-indolo-[5,4,3-[def]isoquinolin-2,5,7(6H)-trione, 3-{2-[2-(2,5-diketo-5,6-dihydroisoindolo[6,7,1-cde]indol-1(2H)-yl)-5-methoxyanilino]ethyl}-1-methyl-1H-imidazol-3-ium bromide, 3-{2-[4-(2,5-diketo-5,6-dihydroisoindolo[6,7,1-cde]indol-1(2H)-yl)(ethyl)anilino]ethyl}-1-methyl-1H-imidazol-3-ium bromide, 3-(2-{1-[4-(dimethylamino)phenyl]-2,5,7-triketo-1,2,5,7-tetrahydro-6H-indolo[5,4,3-def]isoquinolin-6-yl}ethyl)-1-methyl-1H-imidazol-3-ium bromide, 2-(4-morpholinyl)benzo[Imn]perimidino[2,1-b]-[3,8]-phenanthroline-1,3,6-(2H)-trione, 2-[tert. butyl-(2-hydroxyethyl)amino]benzo[Imn]perimidino-[2,1-b][3,8]-phenanthroline-1,3,6(2H)-trione, 2-[1-(hydroxymethyl)-2-methylpropyl]benzimidazo[2,1-b]benzo[Imn]-[3,8]phenanthroline-1,3,6[2H]-trione, 5-methyl-2-(1,3,6-triketo-3,6-dihydrobenzimidazo[2,1-b]benzo[Imn][3,8]-phenanthroline-2(1H)-yl)benzenesulfonic acid and 5-methyl-2-(1,3,6-triketo-3,6-dihydrobenzimidazo[2,1-b]benzo[Imn][3,8]-phenanthroline-2(1H)-yl)benzenesulfonic acid.

phenanthroline-1,3,6(2H)-trione, 2-[1-(hydroxymethyl)-2-methylpropyl]benzimidazo[2,1-b]benzo-[lmn][3,8]phenanthroline-1,3,6[2H]-trione, 5-methyl-2-(1,3,6-triketo-3,6-dihydrobenzo-[lmn]perimidino[2,1-b][3,8]-phenanthrolin-2(1H)-yl)benzenesulfonic acid and 5-methyl-2-(1,3,6-tri-keto-3,6-dihydrobenzimidazo[2,1-b]benzo[lmn][3,8]-phenanthrolin-2(1H)-yl)benzenesulfonic acid.

4. Agent for coloring keratin fibers, characterized in that it contains at least one naphthalene derivative of general formula (I) according to one of claims 1 to 3.
5. Agent as defined in claim 4, characterized in that it additionally contains at least one oxidant.
6. Agent as defined in claim 5, characterized in that the oxidant is selected from among hydrogen peroxide or hydrogen peroxide adducts, persulfates and perborates.
7. Agent as defined in claim 4, characterized in that it contains at least one natural or synthetic polymer or modified polymer of natural origin commonly used in cosmetic agents.
8. Agent as defined in claim 7, characterized in that it contains the polymer in an amount from 1 to 5 weight percent.
9. Agent as defined in one of claims 4 to 8, characterized in that it contains the naphthalene derivative of general formula (I) in an amount from 0.01 to 10 weight percent.
10. Agent as defined in one of claims 4 to 9, characterized in that it is a hair colorant.